TEACHER STARTER PACK

Spring 2021
# Table of Contents

**Introduction** .............................................................................................................3
- What is High Steaks?
- Objective
- Eligibility
- Divisions
- Timeline
- Curriculum Connections
- Prizes
- Registration

**What is expected of me?** .........................................................................................8

**What is expected of my students?** ........................................................................9

**Elementary Division** .............................................................................................10
- Rules
- Rubric
- Resources

**Middle School Division** .........................................................................................14
- Rules
- Rubric
- Resources

**High School Division** ...........................................................................................19
- Rules
- Rubric
- Resources

**Marketing Terms Facts** .......................................................................................26

**Tips** .......................................................................................................................32

**Checklist** ...............................................................................................................33

**Contact information** .............................................................................................34
Welcome!

We're happy you're interested in High Steaks! This document has been created to help you best understand, implement, and reap the rewards of this competition.

What is High Steaks?
High Steaks! Beef Marketing Competition is an exciting cross-curricular program for elementary, middle, and high school students to engage with and understand beef production. This experiential learning contest will allow your students to creatively develop a marketing strategy for a product of their choice, while learning about the multitude of agricultural careers and skills it takes to develop and sell a product. Students will also be learning about the beef production industry and beef nutrition as a result of participation. It is funded in part by the Iowa Beef Industry Council.

What is the objective of the contest?
Students will work as a group to develop a marketing and nutrition plan for a beef-centric product or recipe.

Who is eligible to participate?
Third through 12th grade students working in groups or as a classroom in Iowa are eligible to participate. Registration is required in the respective grade divisions. Multiple groups or classrooms from the same school may participate. FFA chapters, home school groups, and private schools are also eligible to participate.

What are the divisions of the contest?
There are three divisions; elementary (grades 3-5), middle school (grades 6-8), and high school (grades 9-12). Each division has slightly different expectations, and will be judged separately.

What’s the timeline?
Registrations will be open until March 1. Final projects are due by March 15. Winners will be announced no later than April 15.

Curriculum Connections:
Students who fully participate in this competition have the opportunity learn about health literacy, nutrition, food safety, writing skills, financial literacy, careers, and many aspects of animal agriculture, from life cycle of cattle to engineering of cattle barns.
• **3rd grade**
  - English Language Arts:
    - W.3.4: With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. 4
    - W.3.7: Conduct short research projects that build knowledge about a topic.
  - 21st Century Skills:
    - 21.3-5.HL.1: Obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health.

• **4th grade**
  - English Language Arts:
    - W.4.4: Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
    - W.4.7: Conduct short research projects that build knowledge through investigation of different aspects of a topic.
  - 21st Century Skills:
    - 21.3-5.HL.1: Obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health.

• **5th grade**
  - English Language Arts:
    - W.5.4: Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
    - W.5.7: Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
  - 21st Century Skills:
    - 21.3-5.HL.1: Obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health.

• **6th grade**
  - English Language Arts:
    - W.6.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
    - WHST.6-8.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
  - 21st Century Skills:
    - 21.6-8.HL.1: Demonstrate functional health literacy skills to obtain,
interpret, understand and use basic health concepts to enhance personal, family and community health.

- **7th grade**
  - English Language Arts:
    - W.7.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
    - WHST.6-8.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
  - 21st Century Skills:
    - 21.6-8.HL.1: Demonstrate functional health literacy skills to obtain, interpret, understand and use basic health concepts to enhance personal, family and community health.

- **8th grade**
  - English Language Arts:
    - W.8.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
    - WHST.6-8.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
  - 21st Century Skills:
    - 21.6-8.HL.1: Demonstrate functional health literacy skills to obtain, interpret, understand and use basic health concepts to enhance personal, family and community health.

- **9th grade**
  - English Language Arts:
    - W.9-10.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
    - WHST.9-10.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
  - 21st Century Skills:
    - 21.9-12.FL.2: Manage money effectively by developing spending plans and selecting appropriate financial instruments to maintain positive cash flow.
    - 21.9-12.HL.1: Demonstrate functional health literacy skills to obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health.
• 21.9-12.HL.5: Demonstrate behaviors that foster healthy, active lifestyles for individuals and the benefit of society.

• 10th grade
  • English Language Arts:
    • W.9-10.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
    • WHST.9-10.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
  • 21st Century Skills:
    • 21.9-12.FL.2: Manage money effectively by developing spending plans and selecting appropriate financial instruments to maintain positive cash flow.
    • 21.9-12.HL.1: Demonstrate functional health literacy skills to obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health.
    • 21.9-12.HL.5: Demonstrate behaviors that foster healthy, active lifestyles for individuals and the benefit of society.

• 11th grade
  • English Language Arts:
    • W.11-12.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
    • WHST.11-12.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
  • 21st Century Skills:
    • 21.9-12.FL.2: Manage money effectively by developing spending plans and selecting appropriate financial instruments to maintain positive cash flow.
    • 21.9-12.HL.1: Demonstrate functional health literacy skills to obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health.
    • 21.9-12.HL.5: Demonstrate behaviors that foster healthy, active lifestyles for individuals and the benefit of society.

• 12th grade
  • English Language Arts:
    • W.11-12.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
• WHST.11-12.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

• 21st Century Skills:
  • 21.9-12.FL.2: Manage money effectively by developing spending plans and selecting appropriate financial instruments to maintain positive cash flow.
  • 21.9-12.HL.1: Demonstrate functional health literacy skills to obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health.
  • 21.9-12.HL.5: Demonstrate behaviors that foster healthy, active lifestyles for individuals and the benefit of society.

What are the prizes?
The marketing plans and/or poster advertisements will be judged by a panel of beef producers and educators (see rubric for judging criteria). The top three teams from each division will be announced as winners. Prizes include:

• 1st Place
  • $200 (made out to school)
  • Virtual tour (FarmChat®) of a beef cattle farm
  • Lunch brought to their school and catered by the Iowa Beef Industry Council (up to $250)
  • Printed certificate

• 2nd Place
  • $100
  • Printed certificate

• 3rd Place
  • $50
  • Printed certificate

Prize money will be written as a check to the school and should be used for class or school use. The FarmChat® program and lunch should directly benefit the winning team/students.

How do I register my classroom?
All classrooms must register to participate in the contest. With registration, your classroom will receive at no cost and courtesy of Iowa Agriculture Literacy Foundation a digital packet with resources such as lesson plans, educational background information, rules, rubrics, and procedures. Registration will close on March 1, 2021. Register now by simply filling out this form: https://www.jotform.com/IowaAgLiteracyFoundation/high-steaks-registration-2021
What is expected of me?

As the educator, your responsibility is to ultimately guide your students to a good final project. This packet includes the full rules and rubrics to give you more guidance about what a good final project looks like.

How you reach these goals are ultimately up to you, but we suggest using IALF or National Agriculture in the Classroom lesson plans covering beef farming, nutrition, and careers in marketing. Suggested resources are included and linked in this packet. Consider following a scenario similar to this to structure your process:

Introduce your students to beef cattle farming.
Consider a science lesson describing the structures and functions of a cow’s body, or about the phenotypic and genotypic differences between a beef and dairy cattle. Use a social studies lesson outlining the production cycle of beef cattle, producers and consumers, or historic and social impacts of cattle. Start an English language arts lesson with a book on beef cattle and a short research paper comparing and contrasting beef and dairy cattle.

Explore the nutritional content of beef and how it can fit into a healthy diet.
Consider talking specifically about beef in a MyPlate nutrition lesson. Use nutrition labels from beef products for a non-fiction text features English language arts lesson.

Discuss agricultural careers, specifically relating to marketing and food science.
Consider an English language arts or social studies lesson about careers in marketing and communications, or a science lesson about careers in food science. Help students realize the wealth of careers in the agricultural industry that don’t exist on a farm.

Assign students to create the final project, clearly specifying expectations.
Create groups of students and encourage them to parcel duties among themselves. Share examples of previous projects. Encourage them to call-back what they remember about farming beef cattle and the nutritional content of beef as they take on the role of a beef product marketer.

Have fun!
Ultimately, this education project should be enjoyable. Be flexible and have fun!
What is expected of my students?

Students are ultimately responsible for creating a final project that successfully markets a beef product, specifically highlighting its nutritional benefits. Though expectations vary in the divisions, a neat, unique, accurate, and interesting project will earn high praise!

Student projects will need to follow instructions and work together to produce their project. Older students will have more responsibilities than younger students, and will likely need to manage their time more efficiently. Students in middle and high school may need to prepare smaller tasks to work on at home, outside of class time.

For specific expectations of student projects for each division, please reference the rules and rubrics for each division. Examples of previous winning projects are also available to view, to give you or your students an idea for how to formulate the project.

Did you know?

Calves can walk just 1 hour after they are born!
Elementary Division

Rules:
Students must select a beef product and then work together in teams of three or more, or as a classroom, to submit a poster that advertises the product or showcases the health benefits associated with eating beef. Ideas can include, but are not limited to a specific cut of beef, a stand-alone product like beef jerky, grab and go meals that include beef, a beef entrée that would be on school lunch menu, served at a senior citizen center, or even at an upscale restaurant.

All posters must be two dimensional. Posters may be designed electronically on a computer or in hard copy. If in hard copy, the maximum size of the poster board is 22” x 28”. Hard copy posters should be scanned or photographed to make an electronic copy. Electronic files (photos, scans, or digitally created files) will be submitted through an online form. You will receive submission instructions after pre-registration. Original works should be mailed (folding the work is acceptable) to: Iowa Agriculture Literacy Foundation, 5400 University Ave., West Des Moines, IA 50266. Original artwork will not be returned.

Computer aided graphics designed material must be of original design. Use of trademarked or copyrighted material will be grounds for disqualification. If you chose to use clip art or other graphics, please ensure that they are in the public domain.

All posters will be judged by the following criteria:
- Does the poster identify and promote a beef product?
- Does the poster show originality by the student?
- Does the poster show evidence of research and learning about beef?
- Does the poster show artistic merit and creativity?
- Does the poster accurately reflect and portray beef nutrition information?
- Is the poster neat and visually pleasing?

For a detailed description of how judges will score projects, please refer to the elementary division rubric.
<table>
<thead>
<tr>
<th></th>
<th>16-20 pts.</th>
<th>11-15 pts.</th>
<th>6-10 pts.</th>
<th>0-5 pts.</th>
<th>Judge’s Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
<td>The poster clearly identifies, promotes, and defines the product in a way that is exceedingly easy to understand.</td>
<td>The poster identifies, promotes, and defines the product in a way that is easy to understand.</td>
<td>The poster does not identify, promote, or define the product in a way that is easy to understand.</td>
<td>The poster does not identify, promote, or define a specific beef product.</td>
<td></td>
</tr>
<tr>
<td><strong>Visual Impact</strong></td>
<td>The poster is very well-done, showing artistic merit, creativity, and is exceedingly neat and visually pleasing.</td>
<td>The poster shows artistic merit, creativity, and is adequately neat and visually pleasing.</td>
<td>The poster shows some artistic merit and creativity, but is not adequately neat or visually pleasing.</td>
<td>The poster shows little artistic merit, creativity, and/or lacks neat or visually pleasing characteristics.</td>
<td></td>
</tr>
<tr>
<td><strong>Evidence of Learning</strong></td>
<td>The poster clearly shows evidence of superior research, learning, and knowledge about beef.</td>
<td>The poster clearly shows evidence of research, learning, and knowledge about beef.</td>
<td>The poster shows some evidence of research, learning, and knowledge about beef.</td>
<td>The poster shows little evidence of research, learning, and knowledge about beef.</td>
<td></td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>The poster portrays beef nutrition information with exceeding accuracy.</td>
<td>The poster portrays beef nutrition information with accuracy.</td>
<td>The poster portrays beef nutrition information with some accuracy.</td>
<td>The poster does not portray beef nutrition information with accuracy.</td>
<td></td>
</tr>
<tr>
<td><strong>Originality</strong></td>
<td>The poster is eye-catching, interesting, unique, and original, and originality was used when selecting a beef product.</td>
<td>The poster is eye-catching, and unique. The beef product chosen displays some originality.</td>
<td>The poster is eye-catching, but either the poster or beef product lacks some originality.</td>
<td>The poster and beef product do not show originality or unique qualities.</td>
<td></td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Judge’s Comments:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Resources:

Previous year’s winner:

- Central—Ribs (pictured)

Lesson plans:

- **High Steaks! - Elementary** - This lesson walks step-by-step through how to teach relevant content and create a great project for the High Steaks competition.

- **Beef Basics Lesson** – Students will explain the importance of the beef cattle industry including the products the cattle produce, the production process from farm to plate, and how cattle can utilize and obtain energy from grass and other forage.

- **The Stage is Set for Beef** - This lesson plan guides learners through the lifecycle of the beef animal, from cow-calf, to stocker ranch, to feed yard and finally processing.

- **Beef Up Your Nutrition** - Learn about the power of beef in a healthy diet. This lesson plan guides learners through the process of creating a meal plan based on the My Plate guidelines, using beef as a lean protein source.

- **Pasture Cow-Culations** - Beef cattle eat grass for most of their life. They graze on grass that often could not be used to grow other crops. Learners will use math skills to determine the right pasture for each herd of cattle.

- **Built from Beef** - Beef is one of the many products we get from cattle, but it isn’t the only thing! Learners will discover how cattle biproducts provide many of the things we use every day.

- **The Science of Beef Toolkit** - Bring science to life with real-world applications of scientific principles. This kit contains 8 learning tools which support Next Generation Science Standards Life Science Disciplinary Core Ideas.

- **Build a Calf Workshop** - Students will explore genes and heredity in the context of beef cattle. They will discover probability and be introduced to beef breeds.
• **Animals in Iowa** - The students will learn about livestock raised in Iowa while strengthening their language arts and 21st century skills through basic internet research.

• **FoodMASTER: Meat, Poultry and Fish** - In this lesson students will learn how animals utilize nutrients and energy from food humans cannot digest and convert it to meat, a food rich in zinc, iron, and protein. Students will discover how hamburger is formulated for leanness, compare two kinds of hotdogs, and learn about fish.

• **My Cheeseburger Came from the Farm!** - Through a power point presentation & supplemental activities, students learn about types of cattle, their life cycle, what they eat, where they live, and more.

**Videos:**

• *My Family’s Beef Farm read aloud*

• *Cattle Production video playlist* - find videos from cattle farms, about cattle careers, and more with this playlist

**Other resources:**

• *My Family’s Beef Farm by Katie Olthoff* - Learn more about life on a beef cattle farm from Cecelia’s perspective! Read along as he teaches about beef cattle and the care they see on the farm.

• *Beef Ag Mag e-Reader* - Explore this Ag Mag and you’ll discover the power of beef. You’ll also meet some of the amazing men and women who care for their animals, steward (or care for) the land, and provide safe quality food for you and me. Let’s go!

---

**Did you know?**

An average calf weighs 70 pounds at birth.
Middle School Division

Rules:

Students must work together in a group, or as a classroom team, to submit a completed marketing plan of their selected beef-focused product. For each of the four sections outlined (Introduction, Product, Marketing Plan, and Nutrition), students should complete the task noted per each bullet. Assign or encourage students to work on the project piece by piece.

Project plans will be submitted as a single document (only pdf will be accepted) and uploaded through an online submission portal. You will receive submission instructions after registration.

***NOTE*** The marketing plan guidelines loosely correlate to the FCCLA STAR Event Guidelines for Advocacy and Entrepreneurship and the FFA Marketing Plan Career Development Event. Participating schools are encouraged to use resources from any of those events.

1. Introduction:
   
   a. Cover Page: Include name of the product, teacher’s name, school name, grade, teacher contact information.
   
   b. Classroom Information: Share the name of the students who worked on the project, and you can include any acknowledgements or special notes in this section.
   
   c. Overview: Introduce the product idea and preview the contents of the plan.

2. Product:
   
   a. Product Description: Students can use their creativity to develop and describe a beef-focused product or recipe.

   b. Ideas can include, but are not limited to a specific cut of beef, a stand-alone product like beef jerky, grab and go meals that include beef, a beef entree that would be on school lunch menu, served at a senior citizen center, or even at an upscale restaurant.

   c. If a recipe is selected: Include the final recipe in your submission, including all ingredients, measurements, and the procedures for preparing this food product or recipe.
3. Marketing Plan:

   a. Environment:
      
      b. What environment will customers have an opportunity to purchase your item?
      
      c. Examples: A school cafeteria, the grocery store, a farmer’s market, an upscale restaurant, etc. Be as descriptive as possible!
      
   d. Marketing Campaign:
      
      e. Develop a name and slogan for your product or recipe.
      
      f. Create a label for the product. Include product name ingredients, storage recommendations, and serving size.
      
      g. Create an advertising campaign. Create at least one element. Marketing elements can include, but are not limited to:
         
      h. Print advertisement
      i. Radio or podcast advertisement (script or weblink to audio recording)
      j. Commercial (script or link to online video)
      k. Celebrity endorsement
      l. Website
      m. Social media presence
      n. Billboards
      o. And more!
      
      p. Remember to include information about ZIP beef nutrition in one of your three marketing tools. See the beef nutrition section for more information.

4. Beef Nutrition

   a. An overview of the nutritional aspects of the beef in your product
      
      b. Identify and outline the essential nutrients humans get from beef including: iron, choline, protein, selenium, vitamin B6, vitamin B12, zinc, phosphorus, niacin, and riboflavin.
      
      c. Identify total grams of fat and total calories in lean cuts of beef. How does this compare to other protein options?
      
   d. Identify the correct serving size for your beef product.
      
   e. Storage & Handling: Identify the storage and safe food handling procedures which should accompany this food product. This should include the correct cooking temperature(s).

For a detailed description of how judges will score projects, please refer to the middle school division rubric.
| High Steaks: Beef Marketing Competition – Middle School Division Rubric |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| **Introduction/Formatting**     | **19-25 pts.**                  | **12-18 pts.**                  | **6-11 pts.**                   | **0-5 pts.**                    |
| **Introduction is inviting, well-thought out, properly introduces the students’ idea, and previews the content of the plan. Includes name of the product, teacher’s name, school name, grade, teacher contact information.** | | The introduction clearly states the product and preview the content of the plan, but is not particularly inviting to the reader. Includes name of the product, teacher’s name, school name, grade, teacher contact information. | The introduction does not clearly state the product and is not particularly engaging to the reader. Required components are missing: name of the product, teacher’s name, school name, grade, teacher contact information. | Introduction is unclear or nonexistent. |
| Each part of the plan is included and labeled. Entire paper is well formatted, easy to follow, and utilizes proper grammar, spelling, and punctuation. All parts were engaging and cohesive. | Each part of the plan was included. Few spelling or grammatical errors were found and overall plan is mostly cohesive. | One or more parts of the plan were missing or plan contains a number of spelling and grammatical errors. Plan is lacking in cohesiveness. | |
| **Product**                     | **Students put forth a well-thought out, and creative product or recipe. Plan is realistic and beef-centric.** | **Students put forth a creative product or recipe. Plan is realistic and beef-centric.** | **Students put forth a product or recipe. Plan is not realistic or is not beef-centric.** | **Product or recipe lacks creativity or is not well-thought out. Plan lacks a beef element.** |
| Recipe or product description includes all parts (i.e. recipes should include ingredients, measurements, procedures for preparation, etc.) and is easily followed. | Recipe or product description is lacking few parts (i.e. recipes should include ingredients, measurements, procedures for preparation, etc.) and is easily followed. | Recipe or product description includes some parts (i.e. recipes should include ingredients, measurements, procedures for preparation, etc.) or is unorganized. | Recipe or product description lacks most parts and is hard to follow. |
### Marketing Plan

<table>
<thead>
<tr>
<th>The environment where customers will have an opportunity to purchase the item is thoroughly identified and described vividly.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A creative marketing campaign is developed that includes a name and slogan for the product or recipe. A label for the product containing product name, ingredients, storage recommendations, and serving size is provided.</td>
</tr>
<tr>
<td>An effective and imaginative advertising campaign with one or more elements is included in the marketing plan.</td>
</tr>
</tbody>
</table>

### Nutrition

<table>
<thead>
<tr>
<th>Students identified and outlined at least three facts about the importance of essential nutrients of beef in their plan, as it relates to their product or target audience.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing pieces includes information about ZIP as consumer education.</td>
</tr>
<tr>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product are identified and demonstrated.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students identified and outlined at least two facts about the importance of essential nutrients humans get from eating beef in their plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing pieces includes information about ZIP as consumer education.</td>
</tr>
<tr>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product are identified.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students identified at least one fact about the essential nutrients that humans get from eating beef in their plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing pieces don't include information about ZIP as consumer education.</td>
</tr>
<tr>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product may be identified.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students didn't identify facts about the essential nutrients beef provides in their plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing pieces do not include information about ZIP as consumer education.</td>
</tr>
<tr>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product were not identified.</td>
</tr>
</tbody>
</table>

### Total

<table>
<thead>
<tr>
<th>Judge’s Comments:</th>
</tr>
</thead>
<tbody>
<tr>
<td>/100</td>
</tr>
</tbody>
</table>
Resources:

Previous year’s winner:

- Mid-Iowa Youth Beef Team—Cheesy Beefsteak Bake

Lesson plans:

- **High Steaks! - Middle School** - This lesson walks step-by-step through how to teach relevant content and create a great project for the High Steaks competition

- **FoodMASTER Middle: Protein** - Students will examine dietary sources of protein and generally understand the relationship between protein synthesis and amino acids while completing an activity to use beads as a representation of amino acids to construct proteins (polypeptide chains). Students will identify complete and/or incomplete proteins found in both animal and plant food sources.

- **At Home on the Range** - Students will learn about rangelands by participating in a hands-on activity to grow their own grass to represent a beef or sheep ranch.

- **Roll of the Genes** - In this lesson students will learn about genes and how they affect important traits such as growth, reproduction, disease resistance, and behavior. Students will also discover the responsibilities of an animal geneticist.

- **Create Your Own Herd** - Students will be able to understand how heredity affects agricultural decisions regarding wanted traits in animals (specifically beef cattle), and will understand that DNA contains genes which carry traits from generation to generation.

- **The QUEST for the Whole Enchilada** - This lesson utilizes a process learning model to recognize how the Columbian Exchange and early Spanish explorers impacted the culture and cuisine of the Southwest United States. Students will participate in a food lab to make enchiladas and learn about the production of each ingredient.

- **Beef Basics** – Students will learn how to read a meet label and identify primal cut to help choose appropriate beef cuts for certain recipes.

Videos:

- [Cattle Production video playlist](#) - find videos from cattle farms, about cattle careers, and more with this playlist

Other resources:

- **Animal U; Beef** - This online learning platform has scaled learning modules helping students learn about livestock and livestock products.
Rules:

Students must work together in a group, or as a classroom team, to submit a completed marketing plan of their selected beef-focused product. For each of the five sections outlined (Introduction, Product, Marketing Plan, Market Analysis, and Nutrition), students should complete the task noted per each bullet. Assign or encourage students to work on the project piece by piece.

Project plans will be submitted as a single document (only pdf will be accepted) and uploaded through an online submission portal. You will receive submission instructions after registration.

***NOTE*** The marketing plan guidelines loosely correlate to the FCCLA STAR Event Guidelines for Advocacy and Entrepreneurship and the FFA Marketing Plan Career Development Event. Participating schools are encouraged to use resources from any of those events.

1. Introduction:
   a. Cover Page: Include name of the product, teacher’s name, school name, grade, teacher contact information.
   b. Classroom Information: Share the name of the students who worked on the project, and you can include any acknowledgements or special notes in this section.
   c. Overview: Introduce the product idea and preview the contents of the plan.

2. Product:
   a. Product Description: Students can use their creativity to develop and describe a beef-focused product or recipe.
      b. Ideas can include, but are not limited to a specific cut of beef, a stand-alone product like beef jerky, grab and go meals that include beef, a beef entrée that would be on school lunch menu, served at a senior citizen center, or even at an upscale restaurant.
      c. If a recipe is selected: Include the final recipe in your submission, including all ingredients, measurements, and the procedures for preparing this food product or recipe.
3. Market Analysis:
   a. Target Audience:
      b. Who is your ideal customer? Define their characteristics, socio-economic status, food values and interests, etc.
      c. What is the audience’s most influential factors when purchasing this type of beef product? Examples include cost, low-fat or low-calorie, nutritional value, gluten free, etc.
      d. Describe your customer in a way that the judges truly understand your target.
   e. Cost Analysis:
      f. Use a spreadsheet to determine the cost of the ingredients, packaging, and shipping of your product.
      g. What type or container will you use? What is the cost of that container?
      h. What are the shipping or transportation costs of this product?
      i. Determine your preferred profit margin. What is the final price of your product?

4. Marketing Plan:
   a. Environment:
      b. What environment will customers have an opportunity to purchase your item?
         c. Examples: A school cafeteria, the grocery store, a farmer’s market, an upscale restaurant, etc. Be as descriptive as possible!
   d. Marketing Campaign:
      e. Develop a name and slogan for your product or recipe.
      f. Create a label for the product. Include product name ingredients, storage recommendations, and serving size.
      g. Create an advertising campaign. Create at least three elements. Marketing elements can include, but are not limited to:
         h. Print advertisement
         i. Radio or podcast advertisement (script or weblink to audio recording)
         j. Commercial (script or link to online video)
         k. Celebrity endorsement
1. Website
2. Social media presence
3. Billboards
4. And more!

p. Remember to include information about ZIP beef nutrition in one of your three marketing tools. See the beef nutrition section for more information.

4. Beef Nutrition
   a. An overview of the nutritional aspects of the beef in your product
   b. Identify and outline the essential nutrients humans get from beef including: iron, choline, protein, selenium, vitamin B6, vitamin B12, zinc, phosphorus, niacin, and riboflavin.
   c. Identify total grams of fat and total calories in lean cuts of beef. How does this compare to other protein options?
   d. Identify the correct serving size for your beef product.
   e. Storage & Handling: Identify the storage and safe food handling procedures which should accompany this food product. This should include the correct cooking temperature(s).

For a detailed description of how judges will score projects, please refer to the high school division rubric.

Did you know?
The most common beef cattle breeds in the U.S. are Angus and Hereford.
## High Steaks: Beef Marketing Competition – High School Division Rubric

<table>
<thead>
<tr>
<th>Judge’s Score</th>
<th>16-20 pts.</th>
<th>11-15 pts.</th>
<th>6-10 pts.</th>
<th>0-5 pts.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction/Formatting</strong></td>
<td>Introduction is inviting, well-thought out, properly introduces the students’ idea, and previews the content of the plan. Includes name of the product, teacher’s name, school name, grade, teacher contact information.</td>
<td>The introduction clearly states the product and previews the content of the plan, but is not particularly inviting to the reader. Includes name of the product, teacher’s name, school name, grade, teacher contact information.</td>
<td>The introduction does not clearly state the product and is not particularly engaging to the reader. Required components are missing: name of the product, teacher’s name, school name, grade, teacher contact information.</td>
<td>Introduction is unclear or nonexistent.</td>
</tr>
<tr>
<td></td>
<td>Each part of the plan is included and labeled. Entire paper is well formatted, easy to follow, and utilizes proper grammar, spelling, and punctuation. All parts were engaging and cohesive.</td>
<td>Each part of the plan was included. Few spelling or grammatical errors were found and overall plan is mostly cohesive.</td>
<td>One or more parts of the plan were missing or plan contains a number of spelling and grammatical errors. Plan is lacking in cohesiveness.</td>
<td>Two or more parts of the plan are missing or plan contains many spelling and grammatical mistakes throughout or is unorganized and hard to follow.</td>
</tr>
<tr>
<td><strong>Product</strong></td>
<td>Students put forth a well-thought out, and creative product or recipe. Plan is realistic and beef-centric.</td>
<td>Students put forth a creative product or recipe. Plan is realistic and beef-centric.</td>
<td>Students put forth a product or recipe. Plan is not realistic or is not beef-centric.</td>
<td>Product or recipe lacks creativity or is not well-thought out. Plan lacks a beef element.</td>
</tr>
<tr>
<td></td>
<td>Recipe or product description includes all parts (i.e. recipes should include ingredients, measurements, procedures for preparation, etc.) and is easily followed.</td>
<td>Recipe or product description is lacking few parts (i.e. recipes should include ingredients, measurements, procedures for preparation, etc.) and is easily followed.</td>
<td>Recipe or product description includes some parts (i.e. recipes should include ingredients, measurements, procedures for preparation, etc.) or is unorganized.</td>
<td>Recipe or product description lacks most parts and is hard to follow.</td>
</tr>
<tr>
<td>Market Analysis</td>
<td>Target audience is properly identified and fully defined using characteristics, socio-economic status, education background, family size (if applicable), etc. The target audience’s food values and interests are recognized and the audience’s most influential factors when purchasing this type of beef product are described and explained.</td>
<td>Target audience is identified and somewhat defined using characteristics, socio-economic status, education background, family size (if applicable), etc. The target audience’s food values and interests are recognized and the audience’s most influential factors when purchasing this type of beef product are described.</td>
<td>Target audience is identified and somewhat defined using characteristics, socio-economic status, education background, family size (if applicable), etc. The target audience’s food values and interests or the audience’s most influential factors when purchasing this type of beef product are not described.</td>
<td>Target audience is not clearly identified and defined. The target audience’s food values and interests or the audience’s most influential factors when purchasing this type of beef product are not described.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>If a taste test is conducted with the identified target audience following safe food handling guidelines and useable results are effectively reported.</td>
<td>If a taste test is conducted with the identified target audience mostly following safe food handling guidelines and results are reported.</td>
<td>If a taste test is conducted. Safe food handling guidelines were loosely followed and results are reported.</td>
<td>If a taste test was conducted safe food handling guidelines were not followed and results not are well reported.</td>
<td></td>
</tr>
<tr>
<td>The cost of the ingredients, packaging, and shipping of the product are shown on an easy to follow spreadsheet. Important factors included are: type of container used, cost of that container, shipping or transportation costs of the product, preferred profit margin, and final price of the product.</td>
<td>The cost of the ingredients, packaging, and shipping of the product are shown on a spreadsheet. One or more of the following important factors are not included: type of container used, cost of that container, shipping or transportation costs of the product, preferred profit margin, and final price of the product.</td>
<td>The cost of the ingredients, packaging, and shipping of the product are shown. Two or more of the following important factors are not included: type of container used, cost of that container, shipping or transportation costs of the product, preferred profit margin, and final price of the product.</td>
<td>The cost of the ingredients, packaging, and shipping of the product are shown. Three or more of the following important factors are not included: type of container used, cost of that container, shipping or transportation costs of the product, preferred profit margin, and final price of the product.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marketi ng Plan</th>
<th>The environment where customers will have an opportunity to purchase the item is thoroughly identified and described vividly.</th>
<th>The environment where customers will have an opportunity to purchase the item is identified and described.</th>
<th>The environment where customers will have an opportunity to purchase the item is identified.</th>
<th>The environment where customers will have an opportunity to purchase the item is not identified.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A creative marketing campaign is developed that includes a name and slogan for the product or recipe. A label for the product containing product name, ingredients, storage recommendations, and serving size. An effective and imaginative advertising campaign with three or more elements is included in the marketing plan.</td>
<td>A marketing campaign is developed that includes a name and slogan for the product or recipe. A label for the product containing product name, ingredients, storage recommendations, and serving size. An effective advertising campaign with at least three elements is included in the marketing plan.</td>
<td>A marketing campaign is developed that includes a name and slogan for the product or recipe. A label for the product is created, but missing two or more of the following: product name, ingredients, storage recommendations, and serving size. An advertising campaign with three or fewer elements is included in the marketing plan.</td>
<td>A marketing campaign is developed that includes a name and slogan for the product or recipe. A label for the product is created, but missing three or more of the following: product name, ingredients, storage recommendations, and serving size. An advertising campaign with fewer than three elements is included in the marketing plan.</td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td>Students identified and outlined at least three facts about the importance of essential nutrients of beef in their plan, as it relates to their product or target audience.</td>
<td>Students identified and outlined at least two facts about the importance of essential nutrients humans get from eating beef in their plan.</td>
<td>Students identified at least one fact about the essential nutrients that humans get from eating beef in their plan.</td>
<td>Students didn’t identify facts about the essential nutrients beef provides in their plan.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Marketing pieces includes information about ZIP as consumer education.</td>
<td>Marketing pieces includes information about ZIP as consumer education.</td>
<td>Marketing pieces don’t include information about ZIP as consumer education.</td>
<td>Marketing pieces do not include information about ZIP as consumer education.</td>
</tr>
<tr>
<td></td>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product are identified and demonstrated.</td>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product are identified.</td>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product may be identified.</td>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product were not identified.</td>
</tr>
</tbody>
</table>

**Total**

<table>
<thead>
<tr>
<th>Nutrition</th>
<th>Students identified and outlined at least three facts about the importance of essential nutrients of beef in their plan, as it relates to their product or target audience.</th>
<th>Students identified and outlined at least two facts about the importance of essential nutrients humans get from eating beef in their plan.</th>
<th>Students identified at least one fact about the essential nutrients that humans get from eating beef in their plan.</th>
<th>Students didn’t identify facts about the essential nutrients beef provides in their plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marketing pieces includes information about ZIP as consumer education.</td>
<td>Marketing pieces includes information about ZIP as consumer education.</td>
<td>Marketing pieces don’t include information about ZIP as consumer education.</td>
<td>Marketing pieces do not include information about ZIP as consumer education.</td>
</tr>
<tr>
<td></td>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product are identified and demonstrated.</td>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product are identified.</td>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product may be identified.</td>
<td>The storage, serving size, and safe food handling procedures that should accompany the food product were not identified.</td>
</tr>
</tbody>
</table>

**Judge’s Comments: /100**
Resources:

Previous year’s winner:
- **Mid-Iowa Youth Beef Team—ZIP Power Strips**

Lesson plans:
- **High Steaks! - High School** - This lesson walks step-by-step through how to teach relevant content and create a great project for the High Steaks competition.
- **True Beef: From Pasture to Plate** (DVD and educator guide) – This is an innovative educational documentary that follows high school students as they learn about the entire process of beef production. The documentary features culinary and agricultural high school students and is designed to teach students where their food comes from while learning the importance of farming and ranching.

Videos:
- **Cattle Production video playlist** - find videos from cattle farms, about cattle careers, and more with this playlist

Other resources:
- **Animal U: Beef** - This online learning platform has scaled learning modules helping students learn about livestock and livestock products.
- **Animal U: Careers** - This unit of the Animal U learning platform includes scaled learning about agricultural careers.
- **AgExplorer** - Made from a partnership with the National FFA Organization and Discovery Education, this portal includes a career finder and information on careers in agriculture.
- **Kits and Resources by the Iowa Beef Industry Council** - Dig into resources for Family and Consumer Science teachers and elementary educators, as well as great nutrition information for schools.
- **The Cattle Drive and Westward Expansion** - Students will gain a greater understanding of the historical context and purpose of the cattle drives that took place in the mid-1880s. Students will be able to explain the cause and effect relationships of life on the frontier including, population growth, and later the invention and use of barbed wire, refrigeration, and railroads.
There are a lot of marketing terms used throughout the food industry. Marketing terms are used to help differentiate different products that consumers might buy. They are intended to make the product appeal more to the consumer. However, many marketing terms are misleading buzzwords meant to highlight the good while distracting you from the dietary evil. Or meant to make one product seems better than the other even though they are comparable if not identical. These marketing terms are often on packages to encourage you to purchase that company’s product. It is important to understand all of the marketing terms currently being used and not mislead customers when marketing a product.

**Organic vs. Conventional**

**Conventional (or Traditional):** Most cows spend the majority of their life on pastures grazing on grass. For the last three to four months of their life they are moved to a feedlot. Their diet still consists of grass and hay but it is supplemented with corn, soybeans, and other grains. This diet is rich in nutrients and easily digestible for the animals. It allows the animals to put on extra weight and encourages intramuscular marbling (the fat in animal muscle that often improves the taste). Farmers are allowed to fertilize the pasture and the grain fields. They are allowed to spray pesticides and use genetically modified seeds to improve crop yields. Cows may be treated with hormones to promote either muscle growth or estrous syncing in females. Hormones are naturally occurring in the cow’s body and hormone supplements are synthetic versions of the same naturally occurring ones. Farmers may treat sick animals with antibiotics. All cows go through a withdrawal period where the antibiotic completely passes through their system before they can be harvested for human consumption.

**Organic:** Organic-certified cows are required to spend at least four months a year grazing in pastures, their feed is grown without certain chemical fertilizers, pesticides, or genetically modified seeds, and the cows are not treated with hormones or antibiotics. As for produce, the plants are only treated with specific kinds of fungicides, pesticides, or herbicides (yes, organic foods can often be treated with pesticides), and do not use synthetic fertilizers, sewage sludge, genetically modified organisms, or radiation.

**Natural or All-natural vs. Processed**

**All-Natural:** The term “natural” is commonly misunderstood and misinterpreted—probably because the claim isn’t really regulated by the FDA. “With that said, the FDA seems okay with using this term if the foods do not contain added color, artificial flavors, or synthetic substances,” says Maria-Paula Carrillo, MS, RDN, LD. So, basically, just nothing you wouldn’t expect to find in the food. All you need to know is this: Natural does not necessarily mean healthy. All meat is natural and this term should not be used to differentiate quality.

**Processed:** Food that humans eat comes from plants, animals, and fungi. There might be a little bacteria mixed in or some minerals like salt. Plants, animals, fungi, bacteria, and salt are all natural. Even food dyes, artificial flavors, and synthetic substances are usually derived from plants or animals. For example, red food dye usually comes from the cochineal insect, which is natural. Or for example, sliced American cheese is a highly processed product. It does contain milk, but they usually have other ingredients like soybean oil, which is natural.
Naturally Raised: This specific term is verified through a process and program administered by the USDA. Animals must be raised without growth promotants and animals cannot have been fed with antibiotics or animal by-products.

Omega-3s vs. Omega-6s

**Omega-3s:** Omega-3s are a class of polyunsaturated fatty acids, which basically just means they’re liquid at room temperature. (Think fish oil compared to a mostly saturated fat like butter.) The famous omega-3 fatty acids come in 11 different forms, but only three are essential for humans: plant-based ALA, fish-based DHA, and EPA. They have been proven to aid in reducing inflammation, cholesterol levels, body fat, and hunger; can help mitigate arthritis and asthma symptoms; protect your brain from damage due to a high-sugar diet and minimize your risk of Alzheimer’s and depression. Cattle that eat only grass have been shown to have slightly higher levels of Omega 3s than those finished with grain, but not enough to make a difference.

**Omega-6s:** Omega-6 fatty acids are essential fatty acids. They are necessary for human health, but the body cannot make them. You have to get them through food. Along with omega-3 fatty acids, omega-6 fatty acids play a crucial role in brain function, and normal growth and development. As a type of polyunsaturated fatty acid (PUFA), omega-6s help stimulate skin and hair growth, maintain bone health, regulate metabolism, and maintain the reproductive system. A healthy diet contains a balance of omega-3 and omega-6 fatty acids. Meat can be a good source of both. The typical American diet tends to contain 14 to 25 times more omega-6 fatty acids than omega-3 fatty acids.

Grass-fed vs. Grain-finished

Most cows start out living similar lives. The calves are born in the spring, drink milk from their mothers and are then allowed to roam free and eat grass, shrubs or whatever edible plants they find in their environment. This continues for about 6 to 12 months.

**Grass-fed:** Grass-fed (or pasture-raised) cows may continue to live on grassland for the remainder of their lives. A 2010 paper that reviewed three decades of studies from around the world concluded that grass-fed beef is not only lower in total fat content than grain-fed beef, but the kinds of fats it does contain are healthier and less likely to raise cholesterol than grain-fed beef (though there is debate over whether food can raise blood cholesterol levels at all). The review also found that grass-fed beef is higher in cancer-fighting antioxidants and essential vitamins, such as vitamin A, than conventionally raised beef.

**Grain-finished:** These “conventionally” raised cows are moved to feedlots after 6-12 months. The cows are rapidly fattened up with grain-based feeds, usually made with a base of soy or corn. The cows live there for a few months and are then moved into the factory for harvest. This diet of corn helps increase the marbling of the meat and can increase the quality of the final cuts. Meat is evaluated by the USDA for tenderness, juiciness, and flavor as well as the amount of usable lean meat on the carcass. Grain-finished beef is usually going to rank higher for tenderness, juiciness, and flavor than grass-fed. Feeding the cattle grain also increases efficiency of raising the animal, because it takes less time and less feed for the animal to become ready for market.

Prime vs. Choice vs. Select vs. Standard

**Prime:** Prime beef is produced from young, well-fed beef cattle. It has abundant marbling (fat interspersed in muscle tissue). It is generally sold in restaurants and hotels. Prime roasts and steaks are excellent for dry-heat cooking such as broiling, roasting or grilling.

**Choice:** Choice beef is high quality, but has less marbling than Prime. Choice roasts and steaks from the
loin and rib will be very tender, juicy, and flavorful and are suited for dry-heat cooking. Many of the
less tender cuts can also be cooked with dry heat if not overcooked. Such cuts will be most tender
if braised, roasted or simmered with a small amount of liquid in a tightly covered pan.

**Select:** Select beef is very uniform in quality and normally leaner than the higher grades. It is fairly
tender, but because it has less marbling, it may lack some of the juiciness and flavor of the higher
grades. Only the tender cuts should be cooked with dry heat. Other cuts should be marinated
before cooking or braised to obtain maximum tenderness and flavor.

**Standard and Commercial:** Standard and Commercial grades of beef are frequently sold as ungraded
or as store brand meat. Utility, Cutter, and Canner grades of beef are seldom, if ever, sold at retail
but are used instead to make ground beef and processed products.

**GMO**

**GMO:** Though GMO—Genetically Modified Organisms—has become a mainstream term, most people
still don’t know exactly what it means. If you see a product labeled “Non-GMO” or “GMO-Free,” it
means the ingredients used are not from organisms that have had their genetic material
manipulated or altered in a lab. The term is not regulated by the government, but by a non-profit
organization called “The Non-GMO Project.” The National Academy of Sciences recently
concluded in a 400-page document that there’s no evidence to support GMOs pose any health
risk. A non-GMO label tells consumers nothing about their food, except that the product doesn’t
contain ingredients derived from one of eight genetically engineered crops on the market. Non-
GMO labels don’t mean that a food item is healthier, better for the environment, or that it was
farmed without pesticides. A non-GMO label doesn’t even mean that its ingredients weren’t
tinkered with on a genetic level. Virtually all the foods we consume, even organic and heirloom
varieties, have had their genomes altered in very unnatural ways, in the field or in a lab, using
methods that wouldn’t occur in nature, including exposure to mutagenic chemicals and radiation.

**Local vs. Efficiently Produced**

**Local:** “Local” isn’t necessarily regulated, but Congress did pass a law in 2008 to define it to be “the
total distance that the product is transported is less than 400 miles from the origin of the product” or
“the State in which the product is produced.” When you eat foods that are local and in season,
they’re often more affordable, fresher, and packed with the highest amount of flavor and
nutritional value compared to the same produce from across the country that was picked a few
months ago.

**Efficiently Produced:** The opposite of local might be efficiently produced. Local doesn’t always mean
the produce is better. Fruits, grains, and animals are often raised where the climate and soil is best
for them. Oranges aren’t raised in Minnesota because they can’t handle the cold weather. Cattle
might be raised in Florida and then shipped to Iowa to be finished on grain. Then, the cut meat
might be shipped back to Florida. It is more efficient and cost effective to ship the cattle to the
feed rather than shipping the feed to the cattle. The economics of food production uses
economies of scale. A large-scale grower can be more efficient that a small-scale producer.

**Hormone-free**

**Hormone-free:** Hormones occur naturally in the body and help the animal grow. The FDA regulates any
artificial hormones that might be used. Meat raised with hormones have to be safe for humans to
consume and can’t harm the animal or the environment. If hormones are used, they are usually
synthetic versions of naturally occurring hormones. So, the meat can’t be 100% hormone free, but it
could be synthetic hormone free. Some farmers might add hormones to their cattle feed to help sync their breeding females’ estrous cycles. Other farmers might implant small hormone pellets in their cattle that dissolve in a few months. This method results in faster growing animals that are cheaper to raise. Less expensive to raise means less expensive to the consumer.

Antibiotic-free

**Antibiotic-free:** Antibiotics are an essential strategy to help animals get healthy if they get do get sick. Just like a doctor might prescribe an antibiotic for a sick human, a veterinarian may prescribe an antibiotic for a sick animal. The important thing to know is that antibiotics have a withdrawal period before that animal can be harvested. Many antibiotics have a 60-day withdrawal period. That means that the animal waits 60 days or more after it was treated with the antibiotic before it is harvested. The animal won’t have antibiotics in its system or in the meat after this time. If the meat is being sold, it is required by law to be antibiotic free. The label ‘antibiotic free’ doesn’t mean much.

**Raised without Antibiotics:** This term means that the animal was never treated with antibiotics. If cattle do get sick and are treated with antibiotics they are separated from the rest of the herd. Even after they are again healthy, they are sold separately without this label.

Certified Angus Beef

**100% Certified Angus Beef (CAB):** Angus is a great breed of cattle. There is a certification process to guarantee that it is Angus. However, are Angus better than Hereford, Simmental, or even Holstein? Some might argue that they are, but all three can grade the same and be Prime or Choice. CAB doesn’t have to be 100% Angus. The animal could be a cross between an Angus and a Hereford and still be certified as CAB. If you are looking at two steaks right next to each other, you probably couldn’t tell the breed of the animal or which one is an Angus steak. They’ll have the same nutritional values.

Sustainably raised

**Sustainably raised:** This term does not have one definition or one meaning. It is sometimes used to refer to livestock raised in pastures which is seen as more environmentally sustainable. But it could also be used to refer to livestock finished on a grain diet which is more economically sustainable. These two ideas are in conflict making this a very confusing marketing term.

Humanely raised

**Humanely raised:** This term does not have one definition. The term is not regulated by the government, but can be certified by a non-profit organization called “Certified Humane.” It can be used to refer to a number of different practices including: pasture-raised, grass-fed, raised indoors with enrichments, raised without antibiotics, or processed (harvested) humanely. Many farmers raise animals implementing one or more of these practices and have not gone through the certification process.

Other food terms

**Gluten-free:** Gluten is the general term for storage proteins found in certain cereal grains. These proteins—particularly glutenin and gliadin—help food maintain their shape, and they’re the reason your bread is filled with light, fluffy air pockets. If you don’t have celiac disease or a gluten
sensitivity, there’s no real reason for you to avoid gluten.

**Superfoods:** Superfoods are nutrient-dense foods that are often hailed as not only being beneficial to your health but also possessing the power to prevent or cure many diseases. According to Cancer Research UK, a cancer research and awareness charity, “The term ‘superfood’ [has] little scientific basis. It’s certainly true that a healthy, balanced, and varied diet can help to reduce the risk of cancer, but it is unlikely that any single food will make a major difference on its own.”

**Artisanal:** By definition, a product made in limited batches in a traditional or non-mechanized way. If you can’t directly ask the person who crafted this product, it’s not much more than a marketing tactic. We wouldn’t put much merit into the claim on the packaging.

**Probiotic:** Probiotics are live bacterial cultures that we consume naturally in unpasteurized fermented foods. They’re believed to be beneficial to our overall health through their presumed ability to restore a proper balance to our guts. Although, the science behind it has yet to prove how or even if they’re effective; live probiotics often do not survive the harsh environment of the stomach. In fact, the FDA has yet to approve using probiotic supplements to treat health problems, which means marketers can go wild with their probiotic claims—especially when they’re adding a “probiotic strain” not naturally found in the food (like, “probiotic prunes,” “probiotic granola,” and “probiotic baking mixes.”) Unpasteurized fermented foods—like sauerkraut, yogurt, miso, and kefir—that say “live active cultures” are likely the best source of probiotics rather than an item spiked with gut bugs.

**Cage-free or Free Range:** It evokes pictures of chickens running free, but that’s not always the case. Usually, cage-free just means the chickens are enclosed in a barn with no access to the outdoors. Free-range means that barn has a door that allows the chickens to go out, but they rarely use it. The chicken’s natural tendency is to stay close together in flocks and in the protection of an enclosure like a barn.

**Made with Real Fruit:** You’ll often see this on gummies or even in fruit juices. It may just be fruit juice concentrate, which doesn’t possess the same benefits as whole fruit. Fruit juice concentrates are high in fructose—a sugar molecule that our body turns into fat and inflammatory compounds more easily than it does with glucose.

**Whole Grain & Whole Wheat:** Cereal grains—like wheat, rye, oats, and barley—are really just edible seeds from grasses. Each whole seed is made up multiple layers surrounding the germ/embryo (science lingo for a little baby plant), like the endosperm, bran, and husk. When a grain is refined, like it is for white flour, the husk and outer layers of the grain are removed. These protective layers are rich in nutrients, particularly energizing B vitamins and digestion-slowing fiber. Besides the hard exterior husk, whole grains come complete with the first three layers. If a product says “made with whole grains,” it may still contain a majority of white flour.

**Multigrain:** The term simply means that there are different types of grains present, typically those of corn and wheat flour. Many producers may use added dyes to make their product appear more natural.

**Antioxidants:** Antioxidants are compounds that act as our body’s best defense against disease-causing free radicals. Free radicals are uncharged molecules formed as a byproduct of digestion (and other functions, including breathing!), as well as from environmental toxins. When they go unregulated, these free radicals can damage your cells and DNA, accelerating anything from aging to cancer. Foods that are rich in antioxidants are whole fruits and vegetables, green teas, and coffee.

**No artificial preservatives:** According to the FDA, preservatives are used to “[P]revent food spoilage from bacteria, molds, fungi, or yeast (antimicrobials); slow or prevent changes in color, flavor, or texture and delay rancidity (antioxidants); maintain freshness.” Artificial preservatives aren’t the
problem, but the foods they’re often found in tend to be nutritionally sparse. “Preservatives make an important contribution to health. Molds and bacteria are not desirable components of food. It is, however, true that, in general, foods with lots of additives are nutritionally inferior to fresh foods — not because of the additives, but because additives are used in foods that are nutritionally weak.” Sugary or high calorie foods without preservatives are no better than their counterparts, and they will go bad more quickly.

**Fat-free:** Fat is an essential component of the human diet. It helps give food a rich flavor. Fat isn’t unhealthy in moderation, but a lot of fat or a lot of trans-fats in the diet can be unhealthy. Many times if food manufacturers remove fat from a product they will add in additional sugars to maintain an appealing flavor for consumers. This extra sugar can make the product less healthy instead of more healthy.

**HFCS vs. Real Sugar vs. Sugar-free**

**High Fructose Corn Syrup:** High fructose corn syrup (HFCS) is a sweetener that’s created by adding enzymes to break down corn into sugar. Because corn syrup is traditionally a higher percentage glucose (the sugar molecule that your body and brain use primarily for fuel) than fructose (the sweeter-tasting sugar molecule), another enzyme is added to convert some of that glucose into fructose so the syrup is sweeter. The body breaks down fructose differently from glucose, and it can’t use as much of it for energy. HFCS should be eaten in moderation.

**Real Sugar:** Food and beverages labeled with ‘real sugar’ are not made with HFCS, but instead are made with cane sugar, beet sugar, honey, maple syrup, or agave syrup. This label says nothing about the health of the product or the amount of total sugar in it. These alternatives to HFCS are trendy, partly because they’re “natural.” There is no meaningful difference in the fructose and glucose that makes these things sweet, and they’re metabolized in essentially the same way. What’s important is the number of calories one consumes from sugar, especially added sugar.

**Sugar-free:** Possibly even worse are the bold claims of “no sugar” or “reduced sugar” or “no added sugar”. This often equates to not a sweetener-free product, but rather an artificially-sweetened product. In almost every instance you’ll find something like: sucralose, aspartame, maltodextrin, or saccharin.

---

Did you know?

Fully grown cattle weigh about 1300 pounds.
• There are many ways that meat products can be marketed, but in this program it is important to use nutrition as a part of the messaging.

• Not every student will love every aspect of this competition. Consider grouping students with different interests together so they will naturally want to work on different aspects.

• There are many different types of community members that could provide expertise for this project. Consider video chatting with a beef farmer, a dietician, a marketer, or someone who works in advertising. This can help your students get excited about the project.

• Though there are many good and valid ways to teach the content necessary to produce the final project for this competition, one good way would be to use the High Steaks! specific lesson plans, linked in the Resource section under each division.

• Consider partnering with other teachers to make the competition crosscurricular. Talk with the art teacher about creating beef art or advertising art. Talk with the social studies teacher about incorporating the beef supply chain in the economics lessons. Talk with the science teacher about using the beef animal to teach structures and functions. Talk with the kitchen staff about learning nutrition planning. There are many great options for making the experience cross-curricular!

• Search out beef cattle books to have available in the classroom, either for reading times or for reference.

• Have fun! Allow yourself and your students to be creative and follow the learning process organically. You’ll do great!
Checklist

☐ Register your classroom to participate before March 1

☐ Read and review the Teacher Starter Packet, specifically focusing on your student’s division

☐ Help your students learn about beef nutrition and marketing

☐ Prepare your students to make their project (provide time, materials, and guidance)

☐ Help your students stay on target to complete the project

☐ Compile and submit the project in PDF format by March 15

☐ Receive winner status and judges’ comments by April 15

☐ Winning teams will receive prizes shortly thereafter
Contact Information

All questions, comments, and concerns about the High Steaks! Beef Marketing Competition can be directed to Chrissy Rhodes at crhodes@iowaagliteracy.org or 515-331-4181.

Iowa Agriculture Literacy Foundation
www.iowaagliteracy.org
info@iowaagliteracy.org

Iowa Beef Industry Council
www.iabeef.org
Thank you!